## ABSTRACT OF THE DISCLOSURE

An analysis and control device for glass furnaces is of the fuzzy-controller type and uses a control algorithm which receives information relating to the operation of the furnace coming from sensors and from detection means provided on this furnace, as well as set point values input manually by operators. This control algorithm delivers control signals to the various actuators and control means of the furnace. A predictive system, of the neural- and/or fuzzy-type is included which depends on the state of the furnace and on the information about the change in production over time. It defines the various set point values to be assigned to all the furnace actuators, so as to ensure optimum operation for each production phase. The set point values constitute input values for the fuzzy-logic algorithm which controls the furnace.